

EXHIBIT 22

The New York Times | <https://nyti.ms/2z16kyx>

POLITICS

Tech Executives Are Contrite About Election Meddling, but Make Few Promises on Capitol Hill

By CECILIA KANG, NICHOLAS FANDOS and MIKE ISAAC OCT. 31, 2017

WASHINGTON — Executives from Facebook, Google and Twitter appeared on Capitol Hill for the first time on Tuesday to publicly acknowledge their role in Russia's influence on the presidential campaign, but offered little more than promises to do better. Their reluctance frustrated lawmakers who sought stronger evidence that American elections will be protected from foreign powers.

The hearing, the first of three in two days for company executives, served as an initial public reckoning for the internet giants. They had emphasized their role as public squares for political discourse but are being forced to confront how they were used as tools for a broad Russian misinformation campaign.

Both Democrats and some Republicans on a Senate Judiciary subcommittee complained that the companies had waited nearly a year to publicly admit how many Americans were exposed to the Russian effort to spread propaganda during the 2016 campaign. Senators pushed for harsher remedies, including regulations on their advertising practices akin to rules for political advertising on television.

“Why has it taken Facebook 11 months to come forward and help us understand the scope of this problem, see it clearly for the problem it is and begin to work in a responsible legislative way to address it?” asked Senator Chris Coons, Democrat of Delaware.

The most pointed exchanges were aimed at Facebook, which acknowledged on Monday before the hearings that more than 126 million users potentially saw inflammatory political ads bought by a Kremlin-linked company, the Internet Research Agency. Facebook has drawn particular ire from lawmakers for its early brushoff of fake news and foreign interference on its site, which its chief executive, Mark Zuckerberg, dismissed as a “crazy idea” just after the election.

Since then, the company has scrambled to appease lawmakers by promising to hire more than 1,000 people to manually review political ad purchases and to make public the funding behind those ads.

“The foreign interference we saw was reprehensible,” Colin Stretch, Facebook’s general counsel, told senators.

The companies also acknowledged that they were struggling to keep up with the threat of foreign interference.

“The abuse of our platform to attempt state-sponsored manipulation of elections is a new challenge for us — and one that we are determined to meet,” said Twitter’s acting general counsel, Sean Edgett.

At the heart of the companies’ problems are business models that reward viral content — which can include misinformation — and an enormous advertising business that is automated and unable to easily spot ads purchased by foreign governments.

In a sign of the shifting political winds for tech giants, Republicans, who have been more restrained in their criticism of the companies, were more skeptical on Tuesday. In one contentious exchange, Senator John Kennedy, Republican of Louisiana, pressed Mr. Stretch on whether Facebook could possibly police all of its advertisers.

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ARTICLES REMAINING

“I’m trying to get us down from La-La Land here,” Mr. Kennedy said. “The truth of the matter is, you have five million advertisers that change every month. Every minute. Probably every second. You don’t have the ability to know who every one of those advertisers is, do you?”

Mr. Stretch acknowledged that Facebook could not track all those advertisers.

Senator Lindsey Graham, Republican of South Carolina, the chairman of the crime and terrorism subcommittee that held the hearing, said the risk went beyond Russia to other American adversaries. Talking to reporters afterward, he alluded to potential regulation of political advertising online.

“It’s Russia today; it could be Iran and North Korea tomorrow,” Mr. Graham said. “What we need to do is sit down and find ways to bring some of the controls we have on over-the-air broadcast to social media to protect the consumer.”

Facebook, Twitter and Google have not publicly opposed a bipartisan proposal to require reports on who funds political ads online, similar to rules for broadcast television. In private, their lobbyists have praised voluntary efforts to disclose political ad funding and have resisted many aspects of the bill.

Senator Amy Klobuchar, Democrat of Minnesota, said the legislation was essential before the midterm elections in 2018.

“Our midterms are 370 days away, and we don’t have time to mess around with dialogue anymore,” Ms. Klobuchar said in an interview after the hearing. Ms. Klobuchar introduced the bill with Senator Mark Warner, Democrat of Virginia, and Senator John McCain, Republican of Arizona.

During the hearing, some Republicans also sought to play down the Russian effort to tip the election in favor of President Trump, stressing incorrectly that the Kremlin’s agents did not favor a particular presidential candidate in last year’s election.

“Russia does not have loyalty to a political party in the United States,” said Senator Charles E. Grassley, the Republican chairman of the Judiciary Committee. “Their goal is to divide us and discredit our democracy.”

That assertion was at odds with the conclusion of American intelligence agencies that President Vladimir V. Putin of Russia tried to sway the election in favor of Mr. Trump, going beyond just posting disruptive content on social media. Russian operatives also hacked Democratic email accounts and released messages embarrassing to Hillary Clinton's campaign.

Mr. Graham asked Mr. Stretch of Facebook to confirm that the pattern of activity the site saw from Russia was more focused on sowing chaos in the United States than in bolstering Mr. Trump's candidacy.

"During the election, they were trying to create discord between Americans, most of it directed against Clinton," Mr. Graham said, addressing Mr. Stretch. "After the election, you saw Russian-tied groups and organizations trying to undermine President Trump's legitimacy. Is that what you saw on Facebook?"

Mr. Stretch agreed. But the question was narrowly tailored, apparently intended to distance the broader Russian interference from the backing of Mr. Trump.

Though the companies promised to work with government officials, Mr. Stretch stopped short of agreeing to some suggestions.

In one heated exchange, Senator Al Franken, Democrat of Minnesota, asked him to reject political ad purchases in foreign currencies.

"How did Facebook, which prides itself on being able to process billions of data points and instantly transform them in the personal connections with its user, somehow not make the connection that electoral ads, paid for in rubles, were coming from Russia?" Mr. Franken said.

But Mr. Stretch hemmed, saying the rejection of a foreign currency to buy political ads would not solve the problem of foreign interference.

"The reason I'm hesitating on foreign currency is it's relatively easy for bad actors to switch currencies," Mr. Stretch said. "So it's a signal, but not enough."

That response failed to satisfy Mr. Franken, who interrupted with exasperation.

“My goal is for you to think through this stuff a little bit better,” Mr. Franken said, raising his voice.

This week, the companies admitted that the abuse of their platforms was much greater than previously acknowledged. In addition to Facebook’s admission, Google said that agents who were also from the Internet Research Agency uploaded more than 1,000 videos on its YouTube platform. Twitter said the agency published more than 131,000 messages on Twitter.

On Wednesday, the top lawyers for all three companies will appear before the House and Senate intelligence committees, which are conducting their own investigations into the Russian election meddling.

Tuesday’s hearing exposed a much deeper struggle for Facebook, which is trying to tread a delicate line as a technology platform while also fighting against hate speech, violence and misinformation on its site.

“I like that they are contrite, but these issues are existential and they aren’t taking any structural changes,” said Tim Wu, a professor of law at Columbia University. “These are Band-Aids.”

A version of this article appears in print on November 1, 2017, on Page A1 of the New York edition with the headline: Internet Giants Pique Senators With Restraint.

EXHIBIT 23

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Facebook © 2018

Darin Reed Did you read his complete statement explaining how it will work? You have not been relieved of the responsibility, you've been entrusted with it.
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336
View more replies

WEsam Si
بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
أَوْفَعْتَنِي رَبِّكَ أَلَا تَتَنَبَّهُوا إِلَى آيَاتِهِ وَيُؤَلِّفُ الَّذِينَ إِذَا يَتْلُونَ جَنَّاتِكَ الْكِبَرِ أَخَذَهُمَا أَوْ كَلَامُهُمَا فَلَا تَقُلْ
لَهُمَا أَفَبْ وَلَا تَنْهَضُهُمَا وَقُلْ لَهُمَا قَوْلًا كَرِيمًا [الإسراء: 23]
جمعة م...
Like · Reply · 5d
127 Replies · 4 hrs
529

Cathy McCormack I just wish Facebook would work like it used to. I frequently cannot see things I have posted. I do not get current post from friends. I will check something out and when I go back, I am receiving notifications from days or even weeks earlier. I get... See more
Like · Reply · 5d
68 Replies · 42 mins
646

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Mark Zuckerberg
18 January at 06:00 · 🌐

I'm excited to announce that **Kenneth Chenault**, the outgoing CEO of American Express, has agreed to join Facebook's Board of Directors.

I've been trying to recruit Ken for years. He has unique expertise in areas I believe Facebook needs to learn and improve -- customer service, direct commerce, and building a trusted brand. Ken also has a strong sense of social mission and the perspective that comes from running an important public company for decades.

Adding someone to our bo... See more

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👍❤️😄 Bret Taylor, Michael Arrington and 134k others

Top comments ▾

3,854 shares

Write a comment... 🗨️ 📷 📺 🗨️

Kenneth Chenault 🌐 Thanks Mark. I have enjoyed our conversations over the years. I'm very excited about working with you, the board and the team to make a meaningful difference in peoples' lives.
Like · Reply · 6d
253 Replies · 4 hrs
2.5k

هيفاء العبادي Hello Mark Zuckerberg,
I'm a Phd student in computer science and my research is all about building communities and strengthening them, with focus on expanding cities to the virtual world, i.e., hybrid communities. Currently, I'm analyzing the data fro... See more
Like · Reply · 6d
289 Replies · 22 mins
1k

Watson Junior Mark Zuckerberg Can i get a job of even sweeping Facebook walls and floors to make them look more tidy?
Like · Reply · 6d · Edited
62 Replies
373

Steve Farrell One of the bigger issues I have with facebook with the past few years is the algorithms you introduced. instead of having algorithms deciding who's posts I get to see let me have the option in facebook preferences to disable all the algorithms y
Chat (41)

🔍 📧 🗨️

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Mark Zuckerberg is with Priscilla Chan.

17 January at 08:54 · 🌐

First day of preschool. They grow up so quickly.



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👍❤️👍 815k

Top comments ▾

11,259 shares



Write a comment...



Mehmet Ünlü Hi Mark, 🇹🇷❤️🇹🇷 8.1k

Like · Reply · 6d

↪️ 28 Replies · 6 hrs



إسماعيل ابوالتركي المغفاري Thanks Mark ,you made us to be part of your family...and let us know about your important day in your life...



👍❤️👍 716

Like · Reply · 1w

↪️ 38 Replies · 3 hrs



Vivek Kumbar Hey u the one who is reading this comment will be successful in life one day and make your parents feel proud

Like · Reply · 1w

↪️ 28 Replies

👍❤️👍 405



Rosa Jones Yes they do grow up far too fast and I bet you both shed a tear as your beloved Max prepared for her first day at nursery as Mom packed her lunch box its mixed emotions. It's a heartbreaking moment for parents letting go but it's the only way for them to be independent and grow emotionally socially and intellectually ❤️"

Like · Reply · 1w · Edited

↪️ 10 Replies

👍❤️👍 224

Chat (41)



**Mark Zuckerberg**

17 January at 07:12 · Palo Alto · 🌐

Every day that Congress doesn't act more DACA recipients are losing their status.

Dreamers are members of our communities, and there are 800,000 living in fear with no ability to plan for the future. Teachers with DACA don't know if they'll be allowed to teach in a few months -- but somehow we expect them to take care of our children. First responders with DACA don't know if they'll get to stay here -- yet they worked around the clock to save lives after the hurricanes in Te... [See more](#)



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Share



Boz and 108k others

Top comments ▾

5,338 shares



Write a comment...



Tracey Williams Koszegi I'm sorry, Mark Zuckerberg, you and Facebook are far too liberal in your agendas. It is up to persons who are "dreamers" to make their own dreams come true -- that is NOT the responsibility of the United States nor it's true citizens. These persons n... [See more](#)

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972

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Vera Costa If I were you, I would study the laws and history of this country a little more before giving wrong statements. That is embarrassing, immigrants know more about laws and history than the real Americans. God bless!

Like · Reply · 1w



585

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Eileen Smith-Harter Donald Trump is right about that issue... Immigrants have more rights than American s... They also have adopted children from other countries so they don't have to obey American laws ... They use it against the country... And they are not American citizens...they have different laws than American s

Like · Reply · 1w



427

[135 Replies](#)

Mike Dman Hoffmann These dreamers that came over here as kids but are now adults still hiding under the DACA umbrella needed to get citizenship years ago instead of trying to hide under protected status so no

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609

[194 Replies](#)

Claude Albert Correct me if I am wrong but DACA is not a law passed by Congress but rather a dubious Executive Order by Barrack Obama having no judicial review whatsoever. Not even sure if it would stand up in a court of law. It seems to favor a minority of indiv... [See more](#)

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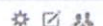


30

[7 Replies · 10 hrs](#)[View more comments](#)**Mark Zuckerberg**

15 January at 21:27 · 🌐

"The arc of the moral universe is long, but it bends towards justice." - MLK

[Chat \(41\)](#)

Michael Arrington, Samah Safi Bayazid and 255k others

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6,903 shares



Write a comment...



حيدر الرحاتي Me and Mark Zukerberg are childhood friends. BUT now, he doesn't talk to me at all. Please don't use Facebook if you support me and let his business ruin!!

Like · Reply · 1w

563

196 Replies · 11 hrs



Aditi Nadkarni In the US, unfortunately, it keeps bending back towards injustice every 8 years or so and on some days it feels like the current administration may have broken the arc.

Like · Reply · 1w

164

100 Replies



Bonnie Reams Mark you need to do back ground on lots the people that comes on face book. I had a man who said he was from USA I play a lone with him for a day I knew he was not and today he ask for money I got rid of him because he was from Africa. Ladys be real carefull who you talk to.

Like · Reply · 1w

107

47 Replies



Dex Torricke-Barton "Through our scientific and technological genius, we have made of this world a neighborhood and yet we have not had the ethical commitment to make of it a brotherhood." The full text of the speech from which that quote comes is instructive. <https://kinginstitute.stanford.edu/.../knock-midnight...>

Remaining Awake Through a Great Revolution | The Martin Luther King, Jr., Research and Education...

KINGINSTITUTE.STANFORD.EDU

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114

29 Replies

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Mark Zuckerberg

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11 January at 16:28 · Menlo Park · 🌐

One of our big focus areas for 2018 is making sure the time we all spend on Facebook is time well spent.

We built Facebook to help people stay connected and bring us closer together with the people that matter to us. That's why we've always put friends and family at the core of the experience. Research shows that strengthening our relationships improves our well-being and happiness.

But recently we've gotten feedback from our community that public content — posts from busine...

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Lynn Padmay Shoop, Hossam Heikal and 217k others

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29,069 shares



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Jared Guynes We shall see how this implements overall.

I've directed more than \$1,000,000 into FB since 2009.... [See more](#)

Like · Reply · 1w

Chat (41)





Jared Guynes Elisabeth Borges I'm not worried, at all. FB has introduced algorithmic changes multiple times over the years, every time we work with it and figure out the best methods.

FB is indeed built for business purposes. It's a 500 billion dollar company, and... [See more](#)

Like · Reply · 1w



419

[View more replies](#)



Carm Jo Facebook pays no attention to reported posts! I have reported a woman threatening suicide in addition to people threatening death and abhorrent racial comments only to be told it didn't go against facebook's policies 🤢 sickening! I also was blocked for a week for "spam" which was not spam but was posts I was putting on pages I run! Ridiculous.

Like · Reply · 1w



2.1k

[271 Replies](#) · 10 hrs



Krishnaprasad Narayan Possible kindly remove option of adding to the groups without their permission..Its really disgusting

Like · Reply · 1w



2.4k

[104 Replies](#)



Robin Elizabeth Mason I've made so many new friends on Facebook. one thing about the newsfeed - i don't know anyone who prefers top stories. if i could set it for most recent and it stay that way, that would be great! thanks

Like · Reply · 1w



1.7k

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Bev McCreedy yes I prefer to have most recent all the time I dont care what happened yesterday or a week ago. Makes me so angry when I have to keep clicking back on most recent. Have it where you click on top stories instead of most recent. Im with you Robin

Like · Reply · 1w



220

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Mark Zuckerberg

4 January at 07:40 · 🌐

Every year I take on a personal challenge to learn something new. I've visited every US state, run 365 miles, built an AI for my home, read 25 books, and learned Mandarin.

I started doing these challenges in 2009. That first year the economy was in a deep recession and Facebook was not yet profitable. We needed to get serious about making sure Facebook had a sustainable business model. It was a serious year, and I wore a tie every day as a reminder.

Today feels a lot like that first year. The world feels anxious and divided, and Facebook has a lot of work to do -- whether it's protecting our community from abuse and hate, defending against interference by nation states, or making sure that time spent on Facebook is time well spent.

My personal challenge for 2018 is to focus on fixing these important issues. We won't prevent all mistakes or abuse, but we currently make too many errors enforcing our policies and preventing misuse of our tools. If we're successful this year then we'll end 2018 on a much better trajectory.

This may not seem like a personal challenge on its face, but I think I'll learn more by focusing intensely on these issues than I would by doing something completely separate. These issues touch on questions of history, civics, political philosophy, media, government, and of course technology. I'm looking forward to bringing groups of experts together to discuss and help work through these topics.

• Chat (41)



we believe it can be a decentralizing force that puts more power in people's hands. (The first four words of Facebook's mission have always been "give people the power".) Back in the 1990s and 2000s, most people believed technology would be a decentralizing force.

But today, many people have lost faith in that promise. With the rise of a small number of big tech companies — and governments using technology to watch their citizens — many people now believe technology only centralizes power rather than decentralizes it.

There are important counter-trends to this --like encryption and cryptocurrency -- that take power from centralized systems and put it back into people's hands. But they come with the risk of being harder to control. I'm interested to go deeper and study the positive and negative aspects of these technologies, and how best to use them in our services.

This will be a serious year of self-improvement and I'm looking forward to learning from working to fix our issues together.



Like



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Share



David Kram, Bret Taylor and 285k others

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17,663 shares



Write a comment...



Sheryl Sandberg Grateful as ever for your leadership and look forward to working with you and our colleagues on these important issues this year.

Like · Reply · 2w

1.9k

152 Replies



Joy Marcus Simon Facebook, Twitter and others needs to be policed. I no longer trust social media because I have no clue what is true and what isn't. Russia and other foreign entities that want to undermine our democracy should be shut down immediately. Fix this soon please!!! Facebook is no longer fun. I miss the old days!

Like · Reply · 2w

1.3k

318 Replies



Brian Gordon I only read half this crap. One of the problems with FB is that anyone can complain about someone and that person gets banned without being able to appeal. Facebook needs a fair justice system, or hopefully millions will soon find a alternative for social media.

Like · Reply · 2w

1.7k

267 Replies



David Kirkpatrick Sounds like exactly the right focus.

Like · Reply · 2w

725

127 Replies

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**Mark Zuckerberg**

...

1 January at 01:50 · 🌐

Here's to a great 2018.

EXHIBIT 24

Facebook, Inc. (FB)

Third Quarter 2017 Results Conference Call

November 1st, 2017

Operator

Good afternoon. My name is Mike and I will be your conference operator today. At this time I would like to welcome everyone to the Facebook third quarter 2017 Earnings Call. All lines have been placed on mute to prevent any background noise. After the speakers' remarks, there will be a question and answer session. If you would like to ask a question during that time, please press star then the number 1 on your telephone keypad. This call will be recorded. Thank you very much.

Ms. Deborah Crawford, Facebook's Vice President of Investor Relations, you may begin.

Deborah Crawford, VP Investor Relations

Thank you. Good afternoon and welcome to Facebook's third quarter 2017 earnings conference call. Joining me today to discuss our results are Mark Zuckerberg, CEO; Sheryl Sandberg, COO; and Dave Wehner, CFO.

Before we get started, I would like to take this opportunity to remind you that our remarks today will include forward-looking statements. Actual results may differ materially from those contemplated by these forward-looking statements.

Factors that could cause these results to differ materially are set forth in today's press release, and in our quarterly report on form 10-Q filed with the SEC. Any forward-looking statements that we make on this call are based on assumptions as of today and we undertake no obligation to update these statements as a result of new information or future events.

During this call we may present both GAAP and non-GAAP financial measures. A reconciliation of GAAP to non-GAAP measures is included in today's earnings press release. The press release and an accompanying investor presentation are available on our website at investor.fb.com.

And now, I'd like to turn the call over to Mark.

Mark Zuckerberg, CEO

Thanks Deborah, and thanks everyone for joining us today.

Our community continues to grow, now with nearly 2.1 billion people using Facebook every month, and nearly 1.4 billion people using it daily. Instagram also hit a big milestone this quarter, now with 500 million daily actives. And we saw good results in the business, where total revenue grew 47% year-over-year and we had our first quarter with more than \$10 billion in revenue.

But none of that matters if our services are used in a way that don't bring people closer together -- or if the foundation of our society is undermined by foreign interference.

I've expressed how upset I am that the Russians tried to use our tools to sow mistrust. We build these tools to help people connect and bring us closer together. And they used them to try to undermine our values. What they did is wrong and we're not going to stand for it.

Now, for those who have followed Facebook, you know that when we set our minds to something, we're going to do it. It may be harder than we realize upfront, it may take longer, and we won't be perfect, but we will get it done. We're bringing the same intensity to these security issues that we've brought to any adversary or challenge that we've faced.

The first step is doing everything we can to help the US government get a complete picture of what happened. We've testified in congress over the past couple of days about the activity we found in last year's election. We're working with congress on legislation to make advertising more transparent. I think this would be very good if it's done well. And even without legislation, we're already moving on our own to bring advertising on Facebook to an even higher standard of transparency than ads on TV or other media. That's because in traditional media, there's no way to see all of the messages an advertiser is showing to different audiences. We're about to start rolling out a tool that lets you see all of the ads a page is running, and also an archive of ads political advertisers have run in the past.

We're also working with other tech companies to help identify and respond to new threats, because as we've now seen, if there's a national security threat involving the internet, it will affect many of the major tech companies. And we've announced a number of steps to help keep this kind of interference off our platform.

This is part of a much bigger focus on protecting the security and integrity of our platform and the safety of our community. It goes beyond elections and it means strengthening all of our systems to prevent abuse and harmful content.

We're doing a lot here with investments both in people and technology. Some of this is focused on finding bad actors and bad behavior. Some is focused on removing false news, hate speech, bullying, and other problematic content that we don't want in our community. We already have about 10,000 people working on safety and security, and we're planning to double that to 20,000 in the next year to better enforce our Community Standards and review ads. In many places, we're doubling or more our engineering efforts focused on security. And we're also building new AI to detect bad content and bad actors -- just like we've done with terrorist propaganda.

I'm dead serious about this, and the reason I'm talking about this on our earnings call is that I've directed our teams to invest so much in security -- on top of the other investments we're making -- that it will significantly impact our profitability going forward, and I wanted our investors to hear that directly from me. I believe this will make our society stronger and in doing so will be good for all of us over the long term. But I want to be clear about what our priority is: protecting our community is more important than maximizing our profits.

So security and the integrity of our services will be a major focus. Beyond this, our focus is on building community. I talked about this last quarter when we changed our mission to focus on building community to bring the world closer together, and that's more important now than ever. And this gets into our roadmap for the next 3, 5 and 10 years.

Over the next three years, the biggest trend in our products will be the growth of video. This goes both for sharing, where we've seen Stories in Instagram and Status in WhatsApp grow very quickly, each with more than 300 million daily actives, and also for consuming video content. We recently launched the Watch tab, where you can discover shows, follow creators, connect with people watching an episode, and join groups with people with similar interests to build the community.

But as video grows, it's important to remember that Facebook is about bringing people closer together and enabling meaningful social interactions; it's not primarily about consuming content passively. Research shows that interacting with friends and family on social media tends to be more meaningful and can be good for our well-being, and that's time well spent. But when we just passively consume content, that may be less true.

When done well, video brings us closer together. We've found that communities formed around video like TV shows or sports create a greater sense of belonging than many other kinds of communities. We've found that Live videos generate 10x the number of interactions and comments as other videos. But too often right now, watching video is just a passive consumption experience. Time spent is not a goal by itself. We want the time people spend on Facebook to encourage meaningful social interactions.

So we're going to focus our products on all the ways to build community around the video that people share and watch. That's something Facebook can uniquely do.

Moving along, over the next five years, I expect us to make some good progress on several newer initiatives.

In messaging, today already more than 20 million businesses are communicating with customers through Messenger. Now we're starting to test business features that make it easier for people to make the same kinds of connections with businesses through WhatsApp.

We rolled out Marketplace to Canada and 17 countries across Europe, giving people the ability to discover, buy, and sell things in their local communities. Today more than 550 million people are using Marketplace and Buy-and-Sell groups on Facebook to connect with other people for transactions.

We're also seeing good progress with Workplace, helping companies connect their own teams internally through their own versions of Facebook. It's been less than a year since we launched Workplace, and today more than 30,000 companies are using it. This quarter, we welcomed on Walmart, the largest employer in the US.

Over the next 10 years, we're working on the foundational technologies needed to bring the world closer together.

I'm proud of the work we're doing with AI. We're now using machine learning in most of our integrity work to keep our community safe. When Hurricane Maria hit Puerto Rico, we used AI to look at satellite imagery and identify where people might live and need connectivity and other resources. Progress in AI can unlock a lot of opportunities, so this quarter we opened a new AI research lab in Montreal and we're building another lab in Paris as well.

This quarter we held Oculus Connect, and we announced Oculus Go -- our first ever all-in-one headset that's great for feeling like you're present with someone when you can't physically be together in

person. It's great for playing games, watching movies, or hanging out with friends. At \$199, we think it's going to help us bring great virtual reality experiences to more people. It ships next year.

At Connect, I also showed off our new Santa Cruz prototype -- which is the first time any company has shown the full experience of positional tracking in a standalone headset and controllers. It's a major technical achievement, and I'm looking forward to getting this into developers' hands next year.

In order to support our community's growth, we need to keep investing in our infrastructure. This quarter, we broke ground on our new Albany data center, and we announced that we'll build our 11th major data center in Henrico County, Virginia. As always, all our new data centers are powered by 100% renewable energy.

These long term investments are important for our community's future. We can do a lot to help people connect through phones and computers, but so much more will be possible in a world where everyone has internet access, where AI improves all our services, and where we can basically teleport anywhere or be with anyone anytime we want.

With all the issues we face, it would be a lot to just invest in addressing those. But we know we also have a responsibility to deliver these fundamental technical and scientific advances to fulfill the promise of bringing people closer together, so we're going to keep making significant investments looking ahead towards the future too.

We've made some real progress this year. Across the board, we have a lot of work to deliver on our mission of bringing the world closer together, but we're committed to rising to the challenge and doing what we need to for our community. Thanks to all of you for being part of this journey, and I'm looking forward to the road ahead.

And now, here's Sheryl to discuss our business.

Sheryl Sandberg, COO

Thanks Mark and hi everyone.

We had a strong third quarter with growth across all regions, marketer segments and verticals. Ad revenue grew 49% year over year. Mobile ad revenue was \$8.9 billion — a 57% year over year increase — making up approximately 88% of total ad revenue.

We're continuing to build our business by focusing on our same three priorities: helping businesses leverage the power of mobile, developing new ad products, and making our ads more relevant and effective.

Today we're announcing that Facebook has over 6 million active advertisers, and we recently announced that Instagram has over 2 million advertisers. The vast majority of these are small and medium sized businesses, which are a major source of innovation and create more than half of all new jobs globally. These businesses often have small ad budgets, so the ability to reach people more effectively is really valuable to them. A great example is Lovebook, a small business in Michigan which lets you make

personalized books for the people you love. During a recent campaign, they used Facebook ads to reach people getting ready to celebrate their first anniversary. They've grown so much from marketing on Facebook that they've been able to hire 10 new employees this year alone. We are proud of the role we are playing in enabling businesses like Lovebook to reach people on mobile, to grow, and to create jobs.

One of our strongest areas this quarter was SMBs in Europe, with revenue growing more than 60% year-over-year. When I was in Germany two months ago, I had a chance to meet Victor, one of the co-founders of Brooklyn Soap Company, which despite its name is based in Hamburg. Victor and his friends came up with the idea for their business while staying in a hostel in Brooklyn. Now they sell their grooming products in 38 countries using mobile video ads on Facebook and Instagram. As a result, their sales increased 62% over the last year. They're one of many small businesses using mobile to find new customers and grow across borders.

Our second priority is developing innovative ad products. Video is exploding, and mobile video advertising is a big opportunity. Until recently, ads were only eligible for Ad Breaks if they also ran in News Feed. In Q3, we gave advertisers the option to run ads in videos alone. We're seeing good early results, with >70% of ad breaks up to 15 seconds in length on Facebook and Audience Network viewed to completion, most with the sound on.

As Mark said, Instagram Stories are growing well, too. People and businesses are finding creative new ways to use full screen vertical video in Stories. This quarter we gave advertisers even more flexibility in the content, format and reach of their ads in Stories.

We're also seeing how immersive video and images can help people discover new products on Facebook. We added a new creative template to Collection Ads, which helps retailers bring their catalogs online. West Elm, a home décor company, recently used this template to promote its furniture and home accessories. They targeted people who already get their physical catalog and saw a 5.5% lift in purchases in stores.

Our third priority is making our ads more relevant and effective. In Q3 we introduced new tools powered by machine-learning and automation to help businesses reach people more likely to spend with them. We also simplified the tools for creating ads, making it easier for businesses of all sizes to advertise with us.

It's important for all businesses to reach the right audience — but it's especially important for small businesses that have limited budgets. Targeting allows them to show ads only to the people they want to reach. Neon Retro Arcade in LA is a great example. They advertise to people within 10 miles of their location who are interested in video games and comic books. Last year, they moved their entire ad budget to Facebook and Instagram, and their revenue is up 25%.

Relevance and effectiveness are also about giving businesses more control over where their ads run. In Q3 we clarified which publishers and creators can include ads next to their content. This is good for

creators, who want guidance on how to earn money from their content on Facebook – and it's good for advertisers, who want transparency and control to make the right decisions for their brands. We're also working to give advertisers more clarity on where their ads were shown, so they can make more informed choices about where to run them in the future.

I want to close by talking about what we're doing to protect our platform and help ensure that the ads and content people see on Facebook and Instagram are legitimate and authentic.

When I was in Washington a few weeks ago, I made clear that we are determined to do everything we can do to minimize abuse going forward. As Mark said, we're investing heavily in new technology and people to review ads and posts. This will enable us to look more closely at the content of the ads, targeting, and the advertiser who submits them – as well as tighten our ads policies, particularly for ads directed at social and political issues. We believe that ads are important to free expression and we will continue to accept ads on issues -- but we will also do our part to elevate the quality of that discourse.

Transparency helps everyone keep advertisers accountable for their messages. We're working with Congress on new requirements for online political advertising, but we're not waiting for legislation. We're building a tool now that will allow anyone to see the ads a Page is running, even if those ads are not targeted to them. We will test it soon in Canada and then in the US in the coming months. For ads related to US federal elections, we'll start sharing even more information, including an archive of past ads, total amount spent, and demographics about the people the ads reached. We're also going to require more thorough documentation from these advertisers — and we'll label their ads so it's clear who paid for them. We believe these actions will set a new standard for transparency in online ads.

Because the interference on our platform went beyond ads, we're also increasing transparency around organic content from Pages. We're looking at ways to provide more information about who is behind a political or issue-based Facebook Page. We believe this will make it harder for deceptive Pages to gain large followings and make it easier for us to identify malicious activity.

We are all committed to getting this right, and to investing in strengthening our platform so we can better serve our community. We are also committed to continuing to help businesses all over the world attract customers, sell their products, and create jobs.

As always, I am grateful to all of our clients for their partnership and to our global Facebook teams for their hard work.

Thanks, and now here's Dave.

David Wehner, CFO

Thanks Sheryl, and good afternoon everyone.

Q3 was another great quarter for Facebook. We saw continued growth and engagement in our community as well as strong performance in our ads business.

Let's begin with our community metrics.

Daily active users in Q3 reached 1.37 billion, up 16% compared to last year. This number represents 66% of our 2.07 billion monthly active users in Q3. MAUs were up 284 million year-over-year or 16%.

Our community growth was again driven by product improvements, promotional data plans, and Internet.org. Note that in Q3 we began to lap the introduction of promotional data plans from mobile operators in markets like India.

Before going to the financials, let me touch briefly on our ongoing efforts to improve our user estimates.

This quarter, we implemented a new methodology to help identify duplicate accounts. As a result, we increased our estimates for duplicate accounts to approximately 10% of worldwide MAUs from our previously disclosed estimate of 6%. Duplicate accounts are those that we believe are used by the same person and represent real activity and engagement on Facebook.

We have also increased our estimate for inauthentic accounts to approximately 2-3% of worldwide MAUs. Inauthentic accounts are largely those that are used for spam and other policy-violating reasons. We continuously monitor and aggressively take down those accounts. These accounts tend to be less active and thus we believe impact DAU less than MAU.

Now turning now to the financials. All comparisons are on a year-over-year basis unless otherwise noted.

Q3 total revenue was \$10.3 billion, up 47% or 45% on a constant currency basis. Foreign exchange tailwinds contributed \$128 million of revenue in Q3.

Q3 total ad revenue was \$10.1 billion, up 49%. On a constant currency basis, our ad revenue growth rate was 47%, down 2 percentage points compared to the growth in Q2.

Ad revenue growth was strong globally, led by Europe and APAC with 56% and 54% growth respectively.

Mobile ad revenue was \$8.9 billion, up 57%.

In Q3, the average price per ad increased 35% and the number of ad impressions served increased 10%, driven primarily by feed ads on Facebook and Instagram. I would note that, compared to a year ago, price is a much more important driver of our ads revenue growth.

Payments & Other Fees revenue was \$186 million, down 5%.

Total expenses were \$5.2 billion, up 34%.

Q3 was our biggest hiring quarter ever. We added over 2,500 people and ended the quarter with over 23,000 employees, up 47% compared to last year.

Operating income was \$5.1 billion, representing a 50% operating margin.

Our tax rate in the third quarter was 10%. Excess tax benefits recognized from share-based compensation decreased our effective tax rate by 6 percentage points, a level that was driven by appreciation in our stock price.

Net income was \$4.7 billion or one dollar and fifty-nine cents per share.

Year-to-date capital expenditures were approximately \$4.5 billion, driven by investments in servers, data centers, office facilities and network infrastructure.

In Q3, we generated over \$4.3 billion in free cash flow and ended the quarter with over \$38 billion in cash and investments.

Year-to-date, we have bought back over \$1 billion of our Class A common stock.

Turning now to the revenue outlook.

Our ads business remains strong. But it's worth noting that in Q3, our year-over-year ad revenue growth rates decelerated for the fifth consecutive quarter on a constant currency basis, and we expect this trend to continue for the foreseeable future.

Going forward, we also expect the growth in advertising revenue will increasingly be driven by price. This is a shift from prior years when growth was primarily driven by increases in supply.

Turning now to expenses.

We anticipate that our full-year 2017 total expenses will grow approximately 35-40% versus our prior range of 40-45%.

We anticipate that full-year 2017 capital expenditures will be approximately \$7 billion.

As mentioned previously, our tax rate will vary based on our stock price. At the current stock price, we would expect that the Q4 rate will be in the low teens.

I also wanted to provide some comments on 2018 expenses and capital expenditures.

Please recognize that these are preliminary estimates as we have not yet finalized our 2018 budget. That said, it is shaping up to be a significant investment year, and I wanted to provide initial guidance to align investors with our most current thinking.

We expect full-year 2018 total expenses will grow approximately 45-60% compared to full-year 2017.

We continue to invest aggressively across the business, but there are three important factors driving an acceleration in our expense growth rates from 2017 levels. First, as Mark outlined in his earlier comments, we are making sizeable security investments in people and technology to strengthen our systems and prevent abuse.

Secondly, we are investing aggressively in video content to support the Watch tab.

Finally, we continue to invest in our long-term initiatives around augmented and virtual reality, AI, and connectivity.

Given our expectation of continued deceleration in revenue growth rates, we expect these significant investments will be net negative on our operating margins.

In addition, we expect to make substantial investments in our infrastructure to support growth and improve our products. As such, we expect full-year 2018 capital expenditures will roughly double from 2017 levels.

We would also anticipate that the full-year 2018 tax rate will be in the mid-teens.

In summary, Q3 was another strong quarter for Facebook across the board. We are excited about the opportunities we see ahead and we will continue to make significant investments to support our growth and our mission.

With that, Mike, let's open up the call for questions.

Operator

Thank you. We will now open the lines for a question and answer session. To ask a question, press "star" followed by the number "one" on your touch-tone phone. Please pick up your handset before asking your question to ensure clarity. If you are streaming today's call please mute your computer speakers. Your first question comes from the line of Eric Sheridan, UBS.

Eric Sheridan: Thanks for taking the question. Maybe revisiting Mark's comments at the beginning of the call. I'd love to get a better sense or granularity about what sort of video content you'd like to see on the platform that could drive a more active or interactive experience than passive?

And then the second question will be what does that mean in terms of the business model? Would there be licensing content, funding content that you do to build the sort of business you're aiming for over the medium to long term? Thank you.

Mark Zuckerberg: The strategy here around helping people connect reflects more on what we do around the videos than some of the content itself, right? So hopefully, the experience on Facebook will not just be that you come and watch a video and you get informed, you feel entertained and that's it; we think that the most valuable thing that people do are help build relationships with other people on the platform.

To the extent that the -- that video can serve as a touchstone for building community and helping facilitate interaction, then that's a thing that we feel like we can uniquely do. So we're going to continue investing heavily in video content for Watch. That is centered on people, that is centered around things that people want to talk and connect around, that give people sense of pride and bring people together. We're going to invest as much in just making sure that we build out the community features around that. And that, I think, is going to be the thing that differentiates this over time.

Operator: Your next question comes from Brian Nowak, Morgan Stanley.

Brian Nowak: Thanks for taking my questions; I have two.

Just Mark, to go back on your focus on community and video, I was wondering if you could show us or kind of help us understand what you're seeing in engagement trends or your time spent per user on the core Facebook platform as you've had so many efforts focused on community and video.

And then secondly for Sheryl, you made such good progress growing the advertising business across SMB and a lot of verticals. I wonder if you could step back, could you talk to any areas or any verticals where you really see the potential for material improvements or verticals you're having a hard time cracking into that you think it really be bigger drivers of ad revenue growth going forward?

David Wehner: So Brian, just on engagement metrics, I mean, we continue to see good growth in DAU, as you saw, in the 16 percent growth that we posted this quarter. In addition, we do continue to see time spent growth per DAU on the Facebook family and on Facebook.

Sheryl Sandberg: For my part, when I think about our marketer segments -- we have SMBs, we have brand, direct response and developers -- we're seeing strong growth across. I think if you think about where the growth remains, it really is in increasing the relevance of the ads.

Because the ads, I think, are getting better in terms of reaching the right people at the right time, but I think there's still a lot more we can do. And as people really use our Custom Audiences, our targeting tools, the quality of the ads improves and the returns improve and the more -- the better we get at measuring those returns, the better the ads get. And so I'll share just one example but one I really love, which is the Alameda County Fair, which is a local fairground in Pleasanton, California.

I happened to meet this woman, Angel, who's running their marketing this year. And they used Facebook to target people within 25 miles of their fair grounds aged 20 to 51 who had specific interest in concerts, music, festivals and theme parks. And what they saw for season pass ticket sales for 2017 was a 50 percent increase compared to 2016, and they attribute that to Facebook. And that's really about finding the people that are interested.

And if you look at the percentage of our ads business where people are using our most sophisticated approaches to finding the right audience, I think we still have a lot of opportunity for growth there. And that will improve both the quality of the ads people see but also the returns to marketers. And I think that will hit all of the verticals and all of the segments.

Operator: Your next question comes from Mark May, Citi.

Mark May: Thank you. I had 2 related questions on video. First on the OpEx guidance. One of the real consistencies of the business is OpEx growth; you've been growing that at \$4 to \$5 billion incremental in spend per year, but the midpoint of your guidance is looking like a \$14 billion increase next year. Is the differential there -- the additional \$6-7 billion -- should we be thinking of that as -- of your video content spend that

you're setting aside possibly to spend next year? Just trying to understand where the significant increase would be coming from.

And then related, the 35 percent increase in ad prices. Would you say that, that's predominantly being driven, the acceleration there, by the mix towards video ad breaks and other longer-form video ads? Thanks.

David Wehner: Sure, Mark. On the acceleration of the growth rate in expenses from 2017 to 2018, I would really look at the sort of -- the growth rate that we grew at in 2017, apply that to the total expense faced and look at that growth in 2018. And then I would say the additional expense that leads to the acceleration is driven by 3 factors, not just 1 factor. And those 3 factors are the ones that I outlined in my commentary -- number one, the substantial investments that Mark highlighted that we're making to just improve the security on our platform; two, the video content investments we're making for Watch Tab; and then 3, additional investments we're making in the long-term initiatives like AR/VR, AI and connectivity. And each of those are significant so it's really the combination of those 3 factors that's driving the expense growth acceleration.

And then on the 35 percent increases in ad prices, this is really being driven off of a couple of things. One is just the auction dynamic, which has -- as supply growth has slowed, then there's more competition, and you're seeing prices increase as demand continues to grow. But I think what is important here is we've been getting better and better at targeting as we optimize for real business results for advertisers, and we're better at converting the signals that we get from those advertisers into finding the right ad spots for them. And I think that's really what's allowing us to improve yield and effectively driving higher effective CPMs for us while still delivering business outcomes to them at attractive ROIs.

That's really what's driving it; not a shift to a different format like video. It's really about us getting better at targeting and working with those -- especially people where we get those downstream signals like direct response advertisers.

Operator: Your next question comes from the line of Douglas Anmuth, JP Morgan.

Douglas Anmuth: Thanks for taking the question. I want to hit on 2 topics. First just on the security comments, you talked about headcount increasing from 10,000 to 20,000. Was hoping you could just help us understand, is that 10,000 fully in the 23,000

headcount that you have today or is there a part of it that's not included in there perhaps because it's not full-time?

And then just secondly, just going back to the ad pricing changes. Dave, just to clarify on that, I mean, it sounds like what you're saying is it's not that advertisers across the board are seeing that substantial of an increase in pricing but that's more an output in your eCPM; is that the right way to think about it? Thanks.

David Wehner: Right, Doug. On the first one, yes, the 10,000 number, that encompasses both employees at Facebook and also employees at partners so it's not all Facebook employees. That's a fully loaded number; that's also in the OpEx guidance as well. But yes, you can't compare the 10,000 to the 23,000 directly.

On the ad pricing, what you're seeing is that most of the advertising that we get isn't necessarily bid on an impression basis; you're getting people bidding for other actions and optimizing against other actions like a click to a website or a downstream e-commerce transaction and app install, and our ability to optimize the inventory that we have against those downstream activities allows us to deliver those at still good prices while seeing effective CPMs go up.

You do have obviously people who are bidding on impressions if they're looking for like a brand campaign or reach campaign, but those aren't necessarily part of the business that's driving up prices. It's more around just us doing a better job at being able to optimize campaigns for people who have downstream activities that we can do that for.

Operator: Your next question comes from the line of Heather Bellini, Goldman Sachs.

Heather Bellini: Great, thank you. I wanted to just ask a question about your content strategy. And I was wondering, how do you think about Facebook Watch in terms of Facebook produced content versus the licensing of content that you might engage in?

And I was wondering if there's a certain type of content that you think will be best suited to optimize the Watch experience. Thank you.

Mark Zuckerberg: I think it might be useful to take a step back and first talk about why we're funding Lighthouse content and Watch overall. Video is growing incredibly quickly on Facebook. And today, most of that is in News Feed. But most people who come to News Feed and who come to Facebook today, in general, are trying to figure out -- they're trying to see what's going on with their friends, see what's happening in the

world; they're not coming necessarily to engage in a specific type of video or specific community around video.

The Watch Tab is mainly -- it's a way to give people a tool to do that. When they want to specifically come and engage around video or communities around that, they can go to the Watch Tab; the intent there is different. Now in order to build that up, we think it makes sense to first invest in a bunch of Lighthouse content -- some that we may produce or some that we may license. To get to your question, we're pretty agnostic on how that goes. We just want to start the flywheel going so that way there's content and communities that are there that support this use case of people coming to Facebook specifically to engage in that.

Long term, our hope is that the business here will primarily be through revenue shares of videos that normal creators and businesses put into the system rather than ones that we proactively go out and license ourselves. That's a look at the where we're trying to get on this but first, we need to build this behavior where people want to come intentionally to engage with this content.

Operator: Your next question comes from the line of Ken Sena, Wells Fargo Securities.

Ken Sena: Thank you. Just going back maybe to the investment and security comments. Maybe can you provide a little more detail just on what that investment could look like and how we could think about that showing up in R&D, cost of revs, G&A or maybe a combination?

And maybe any early thoughts on GDPR and potential impact there and maybe some industry transparency efforts, if they could have a possible benefit? Thank you.

David Wehner: Yes. On the first part, Ken, you're going to see that show up in a variety of different line items; we don't have it specifically broken out. We're making substantial product and engineering investments. So as part of the overall hiring on R&D headcount, that -- there's going to be a pretty significant allocation of that to some of the product-related security initiatives that we're doing. That's going to show up in R&D.

You're going to have some of the ads work that we're doing -- the ads quality at work showing up in the sales and marketing line so you're going to see some there. And then you're going to also just have overall impact on G&A as well for things like

policy-related expenses and the like. I think you're going to see it kind of impacting across the spectrum of our lines, but overall, one of the significant factors driving the acceleration in growth rates.

Sheryl Sandberg: On GDPR, the Facebook family of apps already applies the core principles in the framework because we built our services around transparency and control, and we're building on this to ensure that we comply in May of next year. It's too soon to tell whether this will impact the extent to which EU users opt out of certain services, but we're going to continue to give people personalized experience and be clear about how we're using the data. We believe that we'll be able to obtain consent for uses of the data across Europe and that people still expect the content and their ads to be relevant. We expect a good result here and we're going to do it very carefully and very seriously as we always do.

Operator: Your next question comes from the line of Justin Post, Bank of America Merrill Lynch.

Justin Post: Great. I have 2 things. First, as you've integrated more video content into Facebook, are you seeing better time spent per user? Is that really showing up in more engagement on the site?

And then secondly, it looks like you're running around \$80 a year per user now in the U.S., quite good improvement over the last couple of years. Just think about benchmarking that versus other media categories or other things in traditional media, do you still think you have a lot of room ahead to grow that \$80 over time? Thank you.

Mark Zuckerberg: I'll talk about video engagement and then Dave can jump in on some of the stats.

One of the important points here that I tried to communicate in my comments upfront is that connecting with friends and family and having those meaningful interactions is more important than just consuming content, right? Video is growing incredibly quickly, and that goes across both social content and kind of more passive public consumption of content. And they create different dynamics in the system and I think that's an important thing to understand.

When your friend posts something and you get to engage with it, it might inform you and entertain you, but you also -- if you interact with it you're building a

relationship with that person, right? You feel closer to that person. And that is a really important part of what social networking is supposed to do.

Whereas when you engage with public content, you might get informed or be entertained, but it's not necessarily increasing social capital in the same way or building relationships between people. We really differentiate what the core thing is that we're trying to do -- which is help people connect with each other and build meaningful relationships -- and that's why on a lot of these calls, I emphasize products like Instagram Stories or WhatsApp Status, which are very video-based products but they're improving social interactions.

And we're going to focus a lot more on helping people share videos of their moment in their lives because in a lot of ways, I think if you take a video of yourself and your family out Trick or Treating, that's more engaging than a photo and a better representation of that than writing it out in text.

But overall, I would say not all time spent is created equal. That's why I tried to stress upfront that time spent is not a goal by itself here; what we really want to go for is time well spent. And what the research that we found shows is that when you're actually engaging with people and having meaningful connections, that's time well spent and that's the thing that we want to focus on. Out of this big video thing that's growing very quickly, I think that is the real opportunity and product area that we should be focused on more. And to the extent that there is going to be a lot of public content -- which there will be -- a big part of the focus is going to be around building community and interactions around that content.

David Wehner: Justin, on your question on ARPU in the U.S., we do think that there are opportunities to continue to grow the business in the U.S. on a lot of different fronts. We can continue to grow engagement on core Facebook as well as there's opportunities with Instagram and the other services that we have that are not monetizing significantly today. There's opportunities there.

But most importantly, kind of I would go back to the fact that we're getting better at -- on the ad product side -- of being able to optimize our inventory for the advertisers in a way that will we think, drive good pricing in the system for us and get outcomes for the advertisers. We do think that, that will lead to the potential for additional revenue growth in the U.S.

Operator: Your next question comes from the line of Ross Sandler, Barclays.

Ross Sandler: Great. I had 2 questions for Mark. One, Mark, as you look to make changes around safety and security and kind of (impressions I think as an issue) do you think this will have any adverse impact on engagement or is it just too small to even be material?

And then a follow-up on the video consumption comment happening mostly in the feed. Is the deceleration you guys are seeing around impression growth right now a function of promoting video in the feed versus what else -- other things that might be in there? And I guess asked a different way, should we see impression growth kind of revert back to growth at some point? And is that likely next year or is that further off in the future? Thank you.

David Wehner: So I can take the second one, which is the question about impression growth. There's a couple of factors there. Certainly this quarter, we saw that ad load as predicted -- had a much less significant impact on impression growth. Overall, that story has played out sort of as we thought, and that's one of the reasons you're seeing the impression growth come down.

And then yes, I do think that there are less impressions when people are consuming video, so that also is a factor as more time is spent on video. I think you have both of those factors coming into play. In terms of how those play out going forward, hard to say. We just kind of point to our overall comments on just continued revenue growth deceleration.

And I believe the first question was whether the security investments would have an adverse impact on engagement ...

Mark Zuckerberg: ... yes, and I can speak to that.

Let me be clear on this that people do not want false news or hate speech or bullying or any of the bad content that we're talking about. To the extent that we can eradicate that from the platform that will create a better product, which will also create a stronger, long-term community and better business as well.

The reason why we haven't been able to get these things to the level that we want today is not because we somehow want them on the platform; it's that it's a really hard problem. And we're going to invest both in people and technology because we think that both are really important parts of the solution here to go after all different parts of these problems. And that was what I tried to stress earlier on.

We're going from 10,000 people working on safety and security to more than doubling that to 20,000. We're building -- we're doubling, in some cases, more our engineering teams focused on security. We're building AI to go after more different areas of harmful content and finding fake accounts and other bad actors in the system.

And I expect that all of these things will make our product better over the long term, but we will incur the expenses a lot sooner as we ramp up these efforts. And I also just think that going forward, we're going to investigate these things at a much higher level because we realize that it's an important -- not only for our community and this company -- but it's part of our responsibility to society overall.

Operator: Your next question comes from the line of Rich Greenfield, BTIG.

Rich Greenfield: Hi. Thanks for taking my question. A couple of things. You talked about creators, I think, Mark creating for the platform on their own without you having to invest. But just trying to frame it in the sense of Hollywood -- like I look at what Apple is doing now and going -- hiring a couple of Sony executives and doing a \$5 million an episode buy of a Steven Spielberg show - and I guess, what I'm trying to understand or I think a lot of investors trying to understand is what type of content do you ultimately want?

Because I don't think like someone like Spielberg is going to work for an ad revenue share no matter how good that advertising is like. How do you balance what type of content business you ultimately want to build? And then when you look at sports, which I also think about as being kind of really relevant content that has a huge community around it -- something like the NFL mobile rights, I think, come up next year -- wondering how important are those types of -- or how important is that type of content? I know you were bidding on cricket rights overseas but how important is sports in this mix?

Mark Zuckerberg: Well, I think that the answer to that is we don't know all the answers around what kinds of content are going to work and are not. We will probably experiment with a number of different things.

I do think your point is right that not all kinds of content can be supported by ads no matter how effective we make that. That said, the current model that we have for at least getting some of the Lighthouse content onto the platform is to pay upfront. And what we would like to transition that more to over time and want an increasing

amount of the content is, is revenue shares for ads shown in the video. And as we do better and better on the monetization there, that will support people with higher production costs and doing more premium production and bringing their content to the platform.

And we've certainly found on the Internet and YouTube and in other places that there are whole industries around creators with different cost structures than traditional Hollywood folks who can produce very informative and engaging content that a lot of people like, enjoy and that builds communities and helps people connect together in a way that definitely can be supported by this ad model. I think the answer is we're going to try a bunch of things. That's a bunch of what the budget is. I'm very optimistic that a lot of the stuff will be able to be supported long term, but you're certainly right that not all of it will be able to be supported by ad models alone.

Operator: Your next question comes from the line of Brent Thill of Jefferies.

Brent Hill: Thanks. On video, there's been a lot of questions about the ultimate profitability of this going forward. I was just curious if you could share your view -- I know it's early -- but what your thoughts are there?

David Wehner: Yes, I mean, I think look, today, we're talking about the additional investments we're making in terms of the Lighthouse content on the Watch Tab. We are putting a substantial investment behind that. That clearly is going to have implications for margins along with the other big investments that we're making next year. And then even after the -- after we establish a flywheel here and can get content being produced for ad revenue share, that's going to have a different margin structure than core News Feed.

Even going forward, there's going to be revenue share back to -- back to the content creators so it's going to have a different margin structure than the core business.

Sheryl Sandberg: I think it's worth adding that the ad inventory itself is really valuable for marketers and our clients and also works very well with our other ad products. I'll share a recent one. Visa, with Social Code and BBDO, created 10-second videos with text overlays showing people making digital payments and they targeted millennials and early tech adopters.

And they ran ads -- one group for Facebook News Feed-only, one group for ad breaks only and one group for News Feed and ad breaks combined -- and the best results combined, the ad breaks and the News Feed, they had a 7x lower cost per video view compared to News Feed alone. And so one of the opportunities we have here is increasing inventory. And it's particularly good inventory for marketers because we're seeing nice adoption of video views and really nice impact from those sales.

And it's also the case that our ad products work together. The ability to show something in News Feed and then show a video and watch it and show something on Instagram and measure results across the full funnel, we think, are very worthy investments for the long-term health of the business.

Operator: Your next question comes from the line of Mark Mahaney, RBC Capital Markets.

Mark Mahaney, your line is open.

Mark Mahaney: Sorry about that.

A comment and 2 questions. I think there's incremental spend or this materially increased spend on security is highly unfortunate, but I think it makes eminent sense. I think most long-term investors realize the community maximization, including security would lead to long-term profit maximization, so I think make eminent sense.

Two quick questions. The Watch Tab, is there any evidence or any data points you can give us to what kind of traction you're seeing with that so far? I was surprised by how many people are on Marketplace. Any relevant data like that for Watch Tab?

And then secondly, of all the regions, Europe really struck out to us -- stuck out to us as one that showed surprising acceleration. And I know you talked a little bit about that, Sheryl, about the SMB pickup and traction there. Any other color for why Europe would have accelerated so much in terms of its revenue growth? Thank you.

David Wehner: Sure, let me, I guess, hit both of those and then Sheryl can add any color she'd like.

On the Watch Tab, I think it's just early. And so I think it's too early to be talking about any stats there.

In terms of Europe, one thing to note is that we did pick up currency advantages there. So it was 56 percent on a reported basis but 51 percent on a constant currency basis; still healthy growth rate. I think it's a strong economy there. I think the team is executing well there so I think you've got a variety of factors. And then as Sheryl commented in her prepared remarks, SMB has been particularly strong in Europe. And so I think that's one of the key drivers and one of the things we're really happy with.

Mark Zuckerberg: One clarification on your question, too, is that the 550 million people is across both Marketplace and buy and sell groups; not just the Marketplace tab. That's the total amount of activity that we're seeing there across both of those.

Operator: Your next question comes from the line of Colin Sebastian, Baird.

Colin Sebastian: Thanks for taking my question. First, a quick follow-up on safety and security. I guess, I'm wondering why more of the AI and machine learning that you've built for product and the ad platform can't be utilized or cross-utilized to help mitigate some of the costs of adding people and technology to handle those issues.

And then secondly, related to how much time younger people are spending or not spending on the Facebook apps, I wonder if you've looked at over the course of time the trend in uses as younger people hit different milestones in life such as graduating from college or getting a job and how their usage of the app changes over that time frame? For example, if you're seeing a steady stream of the users coming to Facebook once they hit those milestones. Any color around that would be interesting. Thank you.

Mark Zuckerberg: Sure. I'll speak to the safety and security investment and then Dave can speak to the other question.

We need both technology and people for this. And the best articulation of this that I can make is that today, AI has different strength than people do, right? The AI tools that we've built can enable a system to look at millions of pieces of content and make rough assessments on them and figure out what to flag for people. But ultimately, if you want to get those high-quality judgments today on sensitive content and you want to do with quickly when the stakes are pretty high in terms of taking down content or leaving things up, I mean, we take that extremely seriously, you want people to be looking at that.

Earlier in the year, when we were working on problems like seeing issues when people were going live, right? There was this really serious issue around people with self-harm and, in some cases, suicide on Live. And we made an investment in AI tools and in dramatically increasing the staffing of the team that was working on that and brought the amount of time to review those live videos down through a combination of those things to I think it's under 10 minutes now. That might still be a conservative estimate. And we're continuing to work on that.

Now what we're trying to do is just increase the SLAs that we have across all of these different types of content and security threats that we might see so that way, through a combination of the AI tooling that we build and having people to look at these things, we can get it right faster for more of the types of content.

And you're definitely right that a lot of the AI research that we do is applicable to multiple areas, but we still need to build those tools. It takes a lot of engineering investment and we will be prioritizing that, in some cases, by adding people to teams and in other cases, by trading off and doing more security work instead of other product work that we might have done. But this is really important and this is our priority.

David Wehner: Yes, I think on sort of how people use our products in life stages, I would just sort of -- I would say, generally, what we're trying to do is build a variety of different types of social products that can help in a variety of different use cases so it could be one-on-one messaging with WhatsApp and Messenger. It could be sharing to Groups with the Facebook. It could be the friends that you have on Instagram.

It's -- we're trying to kind of make sure that we flesh out the full range of sharing experiences, and we think that, that has applicability across all the different life stages. And depending on the ages people use the products differently but would not sharing any specific breakouts on that.

Deborah Crawford: Operator we have time for one last question.

Operator: Your last question comes from the line of Youssef Squali, SunTrust.

Youssef Squali: Thank you very much. Just one question. You guys unbundled the video buy; can you speak to pricing -- relative to that 35 percent average increase in ad pricing -- can you maybe just help us understand the disparity that exists today between pricing on the new video platform and the legacy video platform? Thank you.

David Wehner: I'm not totally clear on what you mean by the new video platform and the legacy video platform, but I would just say that this is primarily driven by News Feed pricing, and then you have right-hand column pricing as well so you have impressions on Facebook News Feed, Instagram feed as well as Facebook right-hand column.

Ad breaks are really a relatively small -- a very small factor today. The pricing is really about what is the pricing that you're seeing in the overall system, primarily given on the feed-based products. That's really what the driver is and again there, I would point to the comments that I made about getting better at targeting and driving towards good outcomes for our advertisers as being kind of the reason that we've been able to support higher prices.

Deborah Crawford: Great. Thank you for joining us today. We appreciate your time, and we look forward to speaking with you again.

Operator: Ladies and gentlemen, this concludes today's conference call. Thank you for joining us. You may now disconnect your lines.